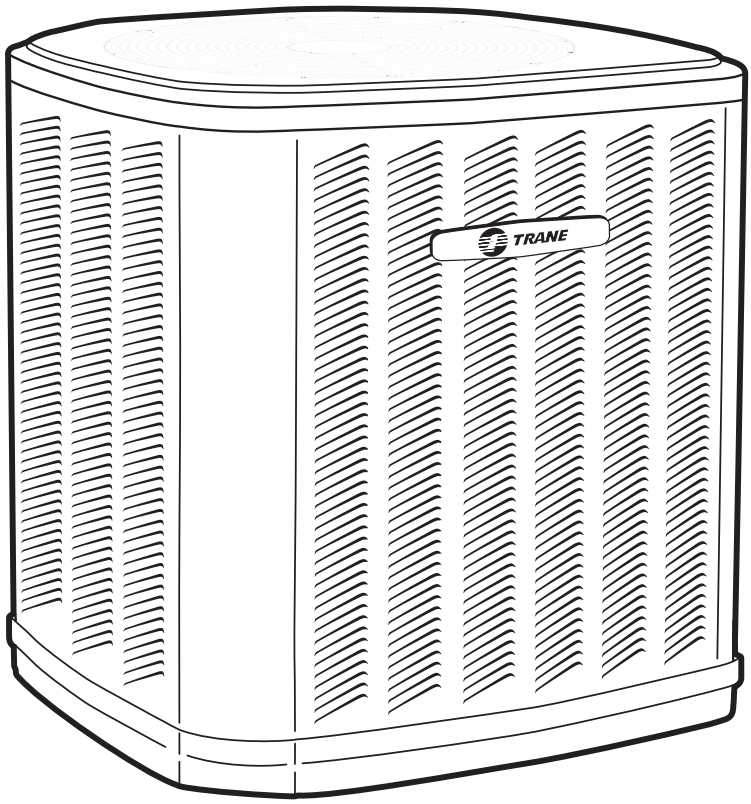
TRANE®

Split System Heat Pump Product Data

XB14 4TWB4

1 ½ - 5 Tons



PUB. NO. 22-1834-09

Features and Benefits

- **CLIMATUFF®** compressor
- Efficiency up to **16.0 SEER** and **8.5 HSPF**
- All aluminum **SPINE FIN™** coil
- **WEATHERGUARD™** fasteners
- **QUICK-SESS™** cabinet, service access and refrigerant connections with full coil protection
- **DURATUFF™** base, fast complete drain, weatherproof
- **COMFORT-R™** mode approved
- Glossy corrosion resistant finish
- Internal compressor high/low pressure & temperature protection
- 018, 024, 030, 060 & 061 ship with start kit
- Compressor Sump Heat
- Liquid line filter/drier
- Polyslate gray cabinet with anthracite gray badge
- High pressure switch
- Demand Defrost with Diagnostics
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 20°F with AY28X084
- Low ambient cooling to 55°F as shipped

- **Extended warranties available**

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General Data

Product Specifications

Model No. ①	4TWB4018G1	4TWB4024G1	4TWB4030G1	4TWB4036G1
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	9	11	15	18
Max Fuse Size (Amps)	15	15	25	30
Compressors	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®
RL AMPS - LR AMPS	6.4 - 38.6	8.3 - 58	11.3 - 68.2	13.2 - 63
Outdoor Fan FL Amps	0.70	0.74	0.92	1.00
Fan HP	1/8	1/8	1/5	1/5
Fan Dia (inches)	23	23	27.5	27.5
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	5/14-LB/OZ	7/02-LB/OZ	8/02-LB/OZ	7/13-LB/OZ
Line Size - (in.) O.D. Gas ③	5/8	5/8	3/4	3/4
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	34 x 30.1 x 33	38 x 30.1 x 33	38.4 x 35.1 x 38.7	37.9 x 35 x 37.9
Weight - Shipping	204	236	273	261
Weight - Net	176	208	239	227
Start Components	YES	YES	YES	YES
Sound Enclosure	NO	NO	NO	YES
Compressor Sump Heat	NO	NO	NO	NO
Optional Accessories: ④				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Crankcase Heater	BAYCCHT300	BAYCCHT300	BAYCCHT300	BAYCCHT300
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset ⑤	TAYREFLN950	TAYREFLN950	TAYREFLN7*	TAYREFLN7*

① Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on AHRI Standard 210/240.
② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
③ Standard line lengths - 80'. Standard lift - 60' Suction and Liquid line.
For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0†. (†denotes latest revision)
④ For accessory description and usage, see page 5.
⑤ * = 15, 20, 25, 30, 40 and 50 foot lineset available.

A-weighted Sound Power Level [dB(A)]

MODEL	SOUND POWER LEVEL [dB(A)]	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)] High Stage							
		63	125	250	500	1000	2000	4000	8000
4TWB4018G	76	52.3	57.8	62.4	67.2	69.4	67.2	59.6	52.5
4TWB4024G	76	50.3	55	58.6	65.3	69.5	64.5	58.6	50.8
4TWB4030G	76	48.8	55.4	60.1	66.4	67.4	63.9	60.2	53.5
4TWB4036G	76	54.5	55.1	58.3	67	69.8	65.9	59.7	49.1
4TWB4042E	78	55.1	52	59.3	64.9	67.2	63.5	60.4	47.6
4TWB4048E	78	55.6	53.3	59.2	66.7	71.7	67.9	60.7	51.3
4TWB4049E	76	43.7	51.2	54.5	61	61.5	57.1	51.3	40.7
4TWB4060E	78	55.1	53.7	61.1	69.2	73.6	68.7	61.4	50
4TWB4061E	76	31.9	58.9	57.1	64.8	66.4	59.8	55.9	51.2

Note: Rated in accordance with AHRI Standard 270-2008.

General Data

Product Specifications

Model No. ①	4TWB4042E1	4TWB4048E1	4TWB4049E1	4TWB4060E1	4TWB4061E1
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	27	29	28	35	36
Max Fuse Size (Amps)	45	50	50	60	60
Compressors	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROL
RL AMPS - LR AMPS	19.9 - 109	21.8 - 117	21.8 - 117	26.4 - 134	26.4 - 134
Outdoor Fan FL Amps	0.93	0.93	1.00	0.93	2.80
Fan HP	1/5	1/5	1/5	1/5	1/3
Fan Dia (inches)	27.6	27.6	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	12/1-LB/OZ	13/9-LB/OZ	13/10-LB/OZ	12/1-LB/OZ	13/12-LB/OZ
Line Size - (in.) O.D. Gas ③	3/4	7/8	7/8	7/8	1-1/8
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	46.4 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7
Weight - Shipping	313	331	331	332	332
Weight - Net	277	294	294	295	295
Start Components	NO	NO	NO	YES	YES
Sound Enclosure	NO	NO	NO	NO	NO
Compressor Sump Heat	YES	YES	YES	YES	YES
Optional Accessories: ④					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084	AY28X084	AY28X084
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Hard Start Kit Scroll	BAYKSKT260	BAYKSKT260	BAYKSKT260		
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset ⑤	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*

① Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on AHRI Standard 210/240.
② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
③ Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line.
For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0†. (†denotes latest revision)
④ For accessory description and usage, see page 5.
⑤ * = 15, 20, 25, 30, 40 and 50 foot lineset available.

General Data

Accessory Description and Usage

Anti-Short Cycle Timer — Solid state timing device that prevents compressor recycling until 5 minutes have elapsed after satisfying call or power interruptions. Use in area with questionable power delivery, commercial applications, long lineset, etc.

Evaporator Defrost Control — SPST Temperature actuated switch that cycles the condenser off as indoor coil reaches freeze-up conditions. Used for low ambient cooling to 30°F with TXV.

Rubber Isolators — 5 large rubber donuts to isolate condensing unit from transmitting energy into mounting frame or pad. Use on any application where sound transmission needs to be minimized.

Hard Start kit — Start capacitor and relay to assist compressor motor startup. Use in areas with marginal power supply, on long linesets, low ambient conditions, etc.

Extreme Condition Mount Kit — Bracket kits to securely mount condensing unit to a frame or pad without removing any panels. Use in areas with high winds, or on commercial roof tops, etc.

AHRI Standard Capacity Rating Conditions

AHRI STANDARD 210/240 RATING CONDITIONS —
(A) Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.

AHRI STANDARD 270 RATING CONDITIONS — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.

Model Nomenclature

Outdoor Units

4 T W B 4 0 3 6 G 1 0 0 0 A A

Refrigerant Type
2 = R-22
4 = R-410A

TRANE

Product Type
W = Split Heat Pump
T = Split Cooling

Product Family
Z = Leadership – Two Stage
X = Leadership
R = Replacement/Retail
B = Basic
A = Light Commercial

Family SEER
0 = 10 3 = 13 6 = 16
1 = 11 4 = 14 8 = 18
2 = 12 5 = 15 9 = 19

Split System Connections 1-6 Tons
0 = Brazed

Nominal Capacity in 000s of BTUs

Major Design Modifications

Power Supply
1 = 200-230/1/60 or 208-230/1/60
3 = 200-230/3/60
4 = 460/3/60

Secondary Function

Minor Design Modifications

Unit Parts Identifier

Gas Furnaces

T U D 2 B 0 8 0 A C V 3 2 A A

Furnace Configuration
TU = Upflow/Horizontal
TD = Downflow/Horizontal

Type
E = 80% Induced Draft Standard
D = 80% Induced Draft Premium
C = 90% Condensing Standard
X = 90% Condensing Premium
H = 95% Condensing Premium

Number of Heating Stages
1 = Single Stage
2 = Two Stage
3 = Three Stage

Cabinet Width
A = 14.5" Cabinet Width
B = 17.5" Cabinet Width
C = 21.0" Cabinet Width
D = 24.5" Cabinet Width

Heating Input
080 = 80,000 MBTUH

Major Design Change

Voltage
9 = 115 Volts / 60 Hertz / Natural Gas
A = 115 Volts / 50 Hertz / Natural Gas
C = 115 Volts / Natural Gas with Communicating System Control
F = 115 Volts / Natural Gas with Integrated Electronic Filter
D = 115 Volts / Natural Gas with Communicating System Control and Integrated Electronic Filter

Air Capacity for Cooling
36 = 3 Ton Standard PSC Motor
H3 = 3 Ton High Efficiency Motor
V3 = 3 Ton Variable Speed Motor

Draft Inducer Speeds
1 = Single Speed
2 = Two Speed
V = Variable Speed

Minor Design Change

Service Digit - Not Orderable

Air Handlers – Residential

4 T E E 3 F 3 6 A 1 0 0 0 A A

Refrigerant Type
4 = R-410A

Application
TE = Fully Convertible
TG = Semi Convertible
TF = Front Return

Product Family
E = Leadership – Variable Speed
P = Leadership
C = Replacement/Retail
B = Basic

Flow Control
0 = No Flow Control
3 = Nonbleed TXV

Feature Identifier
0 = Standard Unit
F = Air-Tite™

Nominal Capacity in 1000's (BTUH)

Major Design Change

Power Supply
1 = Single Phase

Electrical Connection
0 = Pig Tails
B = Circuit Breaker
D = Pull Disconnect

Future Option – Factory Installed Heater Nominal KW Value

Minor Design Modifications

Unit Parts Identifier

NOTE: There will be a phase-in of new model numbers for new air handlers over next 2 years.

Coils – Residential

4 T X C B 0 0 1 C C 3 H C A A

Refrigerant Type
4 - R410A

Product Family
T-Premium
(Heat Pump or Convertible Coil)

Coil Design
X - Direct Expansion Evaporator Coil

Product Family
C - Cased A Coil
A - Uncased A Coil
F - Cased Horizontal Flat Coil

Coil Width (Cased/Uncased)
A - 14.5" / 13.3"
B - 17.5" / 16.3"
C - 21.0" / 19.8"
D - 24.5" / 23.3"
H - 10.5"

Refrigerant Line Coupling
0 - Brazed

Model Number Distinguisher

Major Design Change

Efficiency
C - Standard
S - Hi Efficiency (Derived from 10 SEER products)

Refrigerant Control
3 - TXV - Non-Bleed

Coil Circuitry
H - Heat Pump

Airflow Configuration
A - Upflow Only
U - Upflow / Downflow
H - Horizontal Only
C - Convertible - Upflow, Downflow, Left or Right Airflow

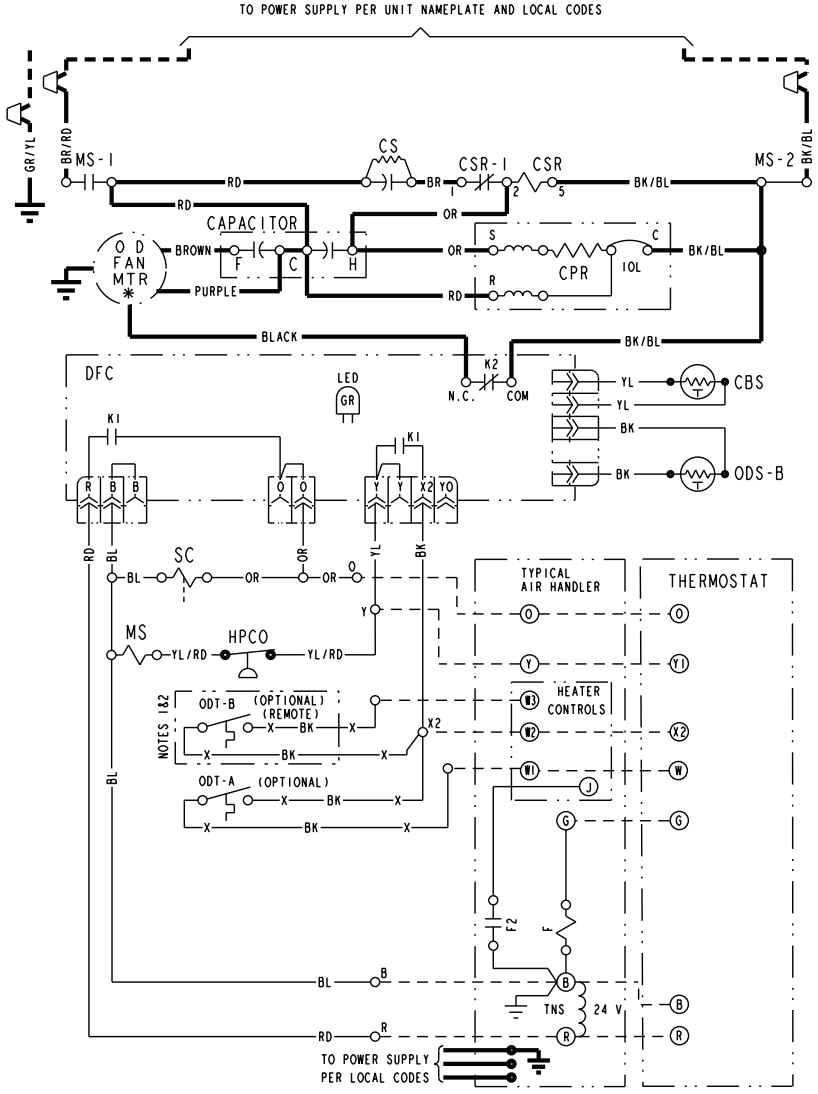
Minor Design Change

Unit Parts Identifier

Electrical Data

Schematic Diagrams

4TWB4018, 4TWB4024, 4TWB4036



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	RESISTANCE HEAT SWITCH
CSR	CAPACITOR SWITCHING RELAY	SC	SWITCHOVER VALVE SOLENOID
DFC	DEFROST CONTROL	SM	SYSTEM "ON-OFF" SWITCH
F	INDOOR FAN RELAY	TDL	DISCHARGE LINE THERMOSTAT
HA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

⚠ WARNING	⚠ CAUTION
HAZARDOUS VOLTAGE!	USE COPPER CONDUCTORS ONLY!
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.	UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!	FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

COLOR OF WIRE
BK/BL BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER

BK	BLACK	OR	ORANGE	YL	YELLOW
BL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WH	WHITE	PR	PURPLE

NOTES:

1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER.
   IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

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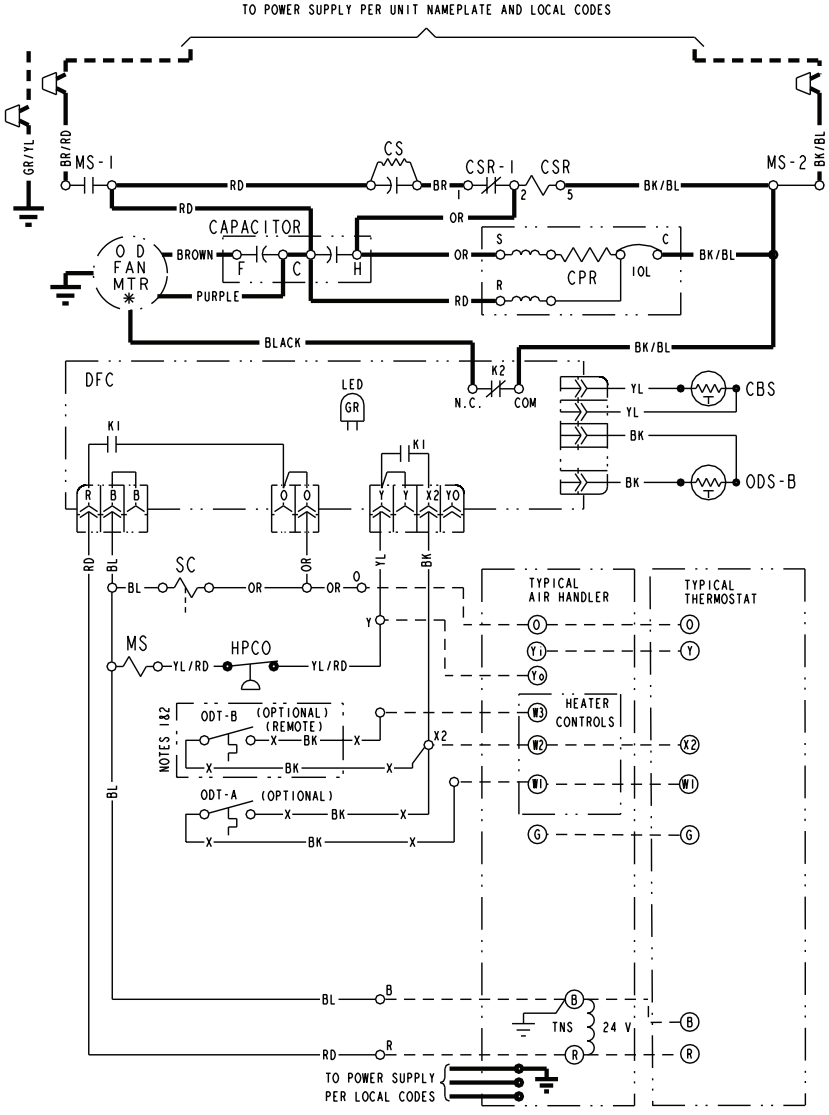
Electrical Data

Schematic Diagrams

4TWB4030



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	RESISTANCE HEAT SWITCH
CSR	CAPACITOR SWITCHING RELAY	SC	SWITCHOVER VALVE SOLENOID
DFC	DEFROST CONTROL	SM	SYSTEM "ON-OFF" SWITCH
F	INDOOR FAN RELAY	TDL	DISCHARGE LINE THERMOSTAT
HA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

⚠ WARNING	⚠ CAUTION
HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!	USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

COLOR OF WIRE
BK/BL BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER

BK	BLACK	OR	ORANGE	YL	YELLOW
BL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WH	WHITE	PR	PURPLE

NOTES:

1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER.
   IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

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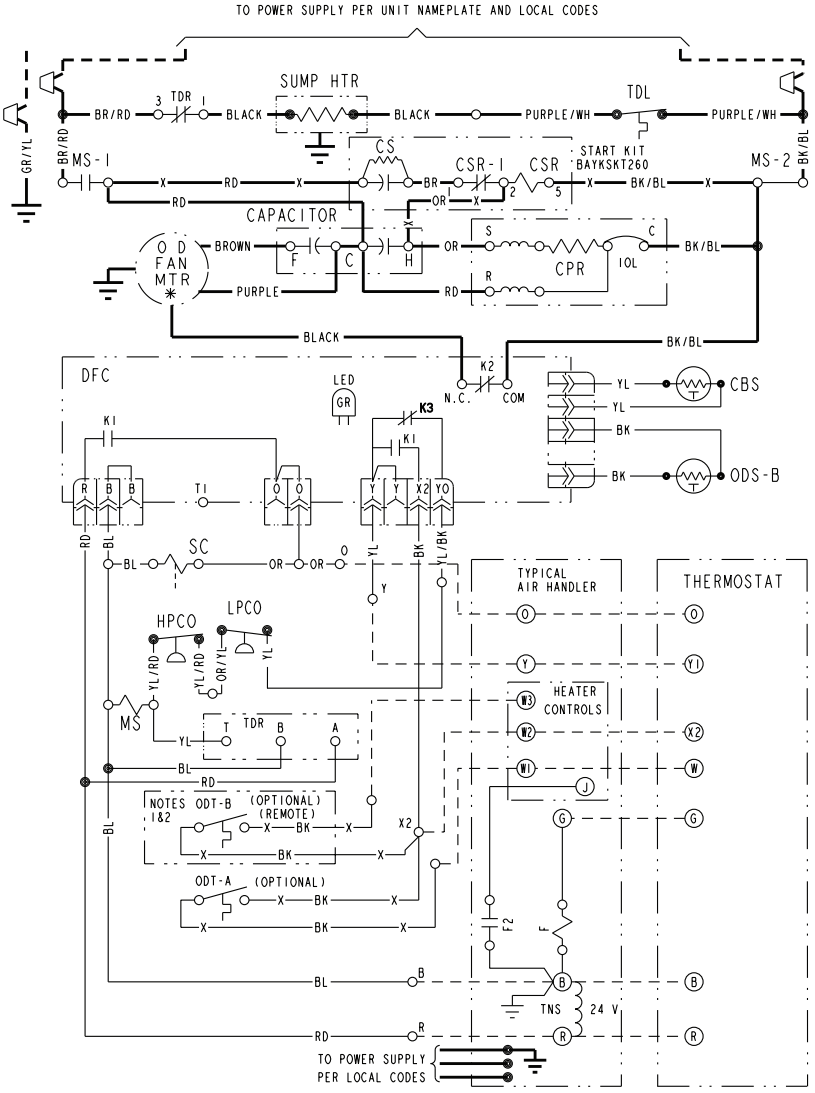
Electrical Data

Schematic Diagrams

4TWB4042



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	RESISTANCE HEAT SWITCH
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DFC	DEFROST CONTROL	SM	SYSTEM "ON-OFF" SWITCH
F	INDOOR FAN RELAY	TDL	DISCHARGE LINE THERMOSTAT
HA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

⚠ WARNING	⚠ CAUTION
HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!	USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

BK/BL — COLOR OF WIRE
BLACK WIRE WITH BLUE MARKER
4 — COLOR OF MARKER

BK	BLACK	OR	ORANGE	YL	YELLOW
BL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WH	WHITE	PR	PURPLE

NOTES:

1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER.
   IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

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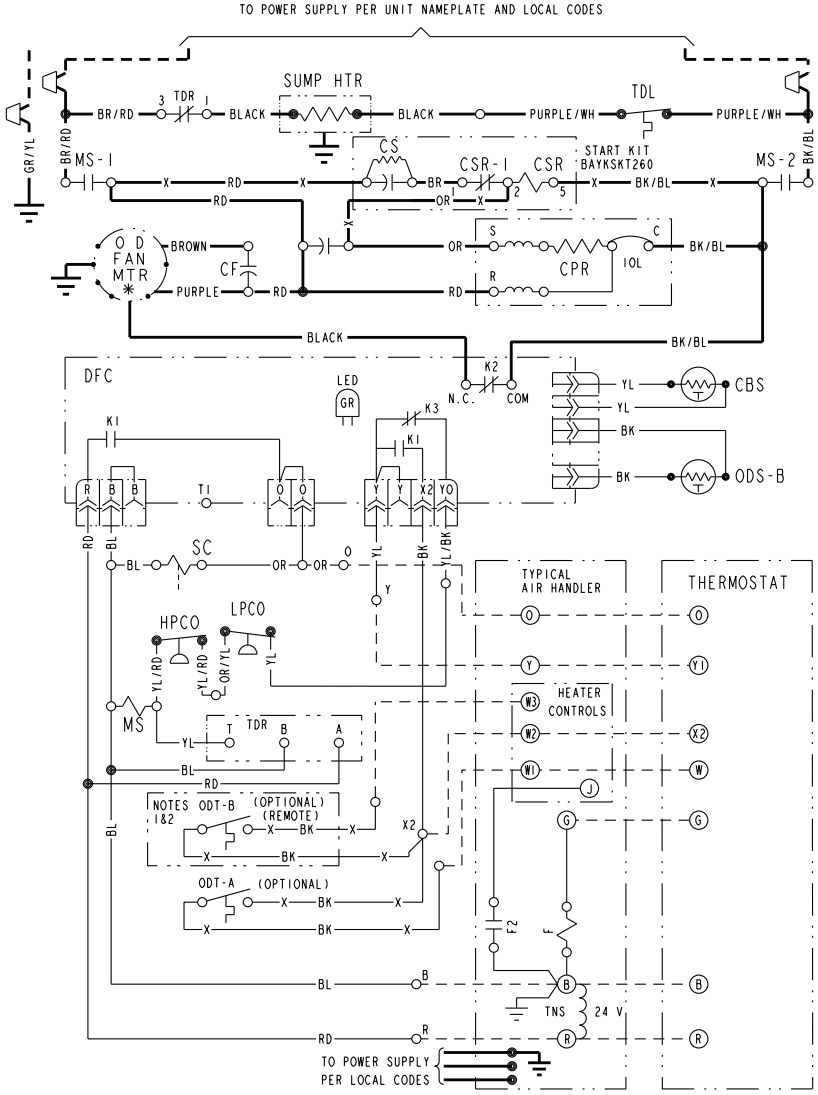
Electrical Data

Schematic Diagrams

4TWB4048



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
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CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
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HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

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HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!	USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

BK/BL — COLOR OF WIRE; BLACK WIRE WITH BLUE MARKER; COLOR OF MARKER

BK	BLACK	OR	ORANGE	YL	YELLOW
BL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WH	WHITE	PR	PURPLE

NOTES:

1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER.
   IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

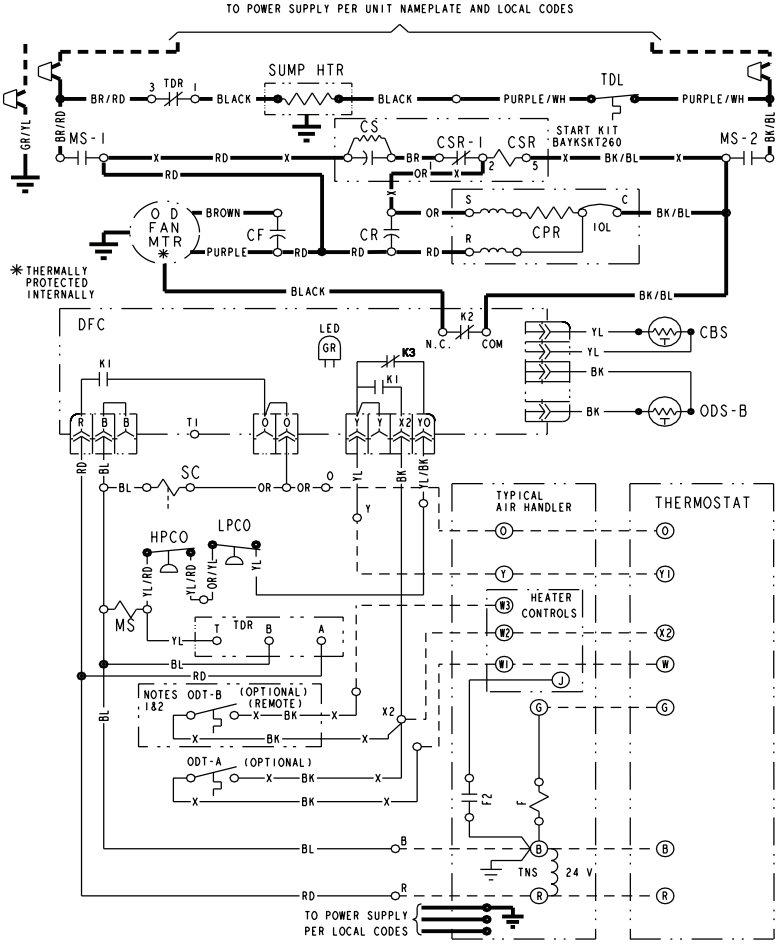
Printed from D156128P02 Rev 00

Electrical Data

Schematic Diagrams

(SEE LEGEND)

4TWB4049E



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	RESISTANCE HEAT SWITCH
CSR	CAPACITOR SWITCHING RELAY	SC	SWITCHOVER VALVE SOLENOID
DFC	DEFROST CONTROL	SM	SYSTEM "ON-OFF" SWITCH
F	INDOOR FAN RELAY	TDL	DISCHARGE LINE THERMOSTAT
HA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT
		TDR	TIME DELAY RELAY

⚠ WARNING	⚠ CAUTION
HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!	USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

COLOR OF WIRE
BK/BL BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER

BK	BLACK	OR	ORANGE	YL	YELLOW
BL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WH	WHITE	PR	PURPLE

NOTES:

1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

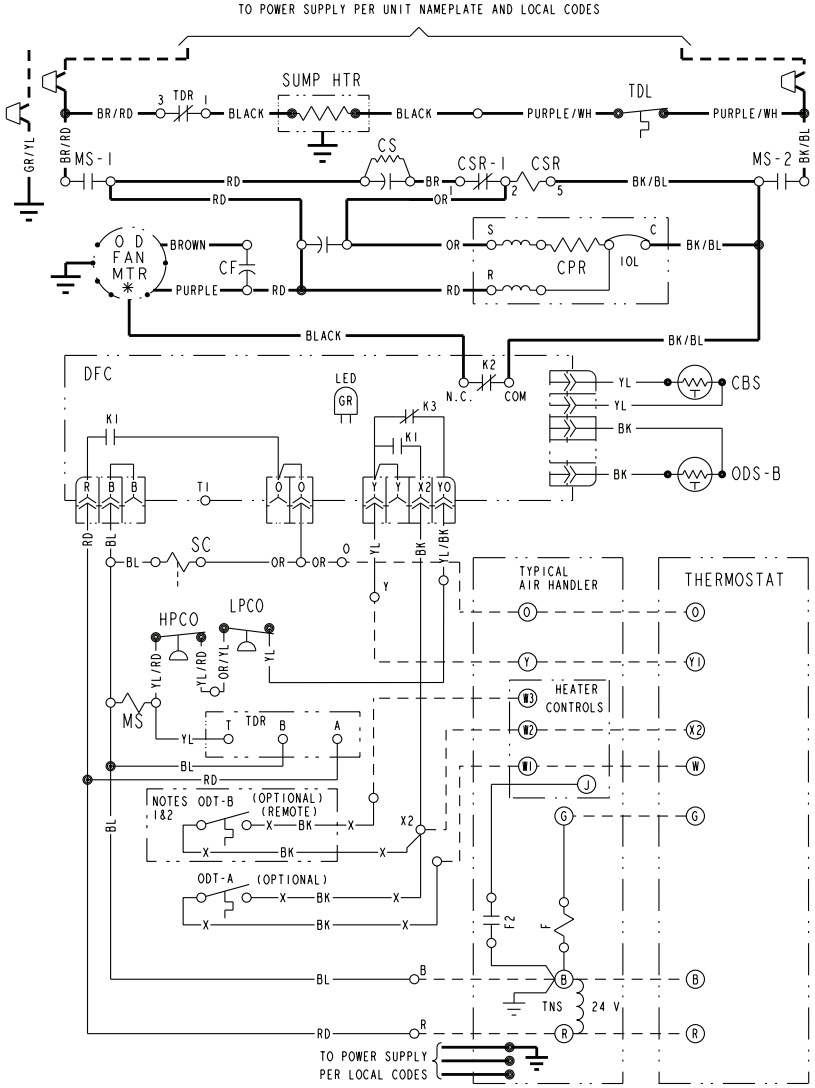
TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

PRINTED FROM D156976P01 REV. 00

Electrical Data

Schematic Diagrams

4TWB4060



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
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CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
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HA	HEATING ANTICIPATOR	TNS	TRANSFORMER
HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
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⚠ WARNING	⚠ CAUTION
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BK/BL — COLOR OF WIRE; BLACK WIRE WITH BLUE MARKER — COLOR OF MARKER

BK	BLACK	OR	ORANGE	YL	YELLOW
BL	BLUE	RD	RED	GR	GREEN
BR	BROWN	WH	WHITE	PR	PURPLE

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FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after “Y” call is removed.

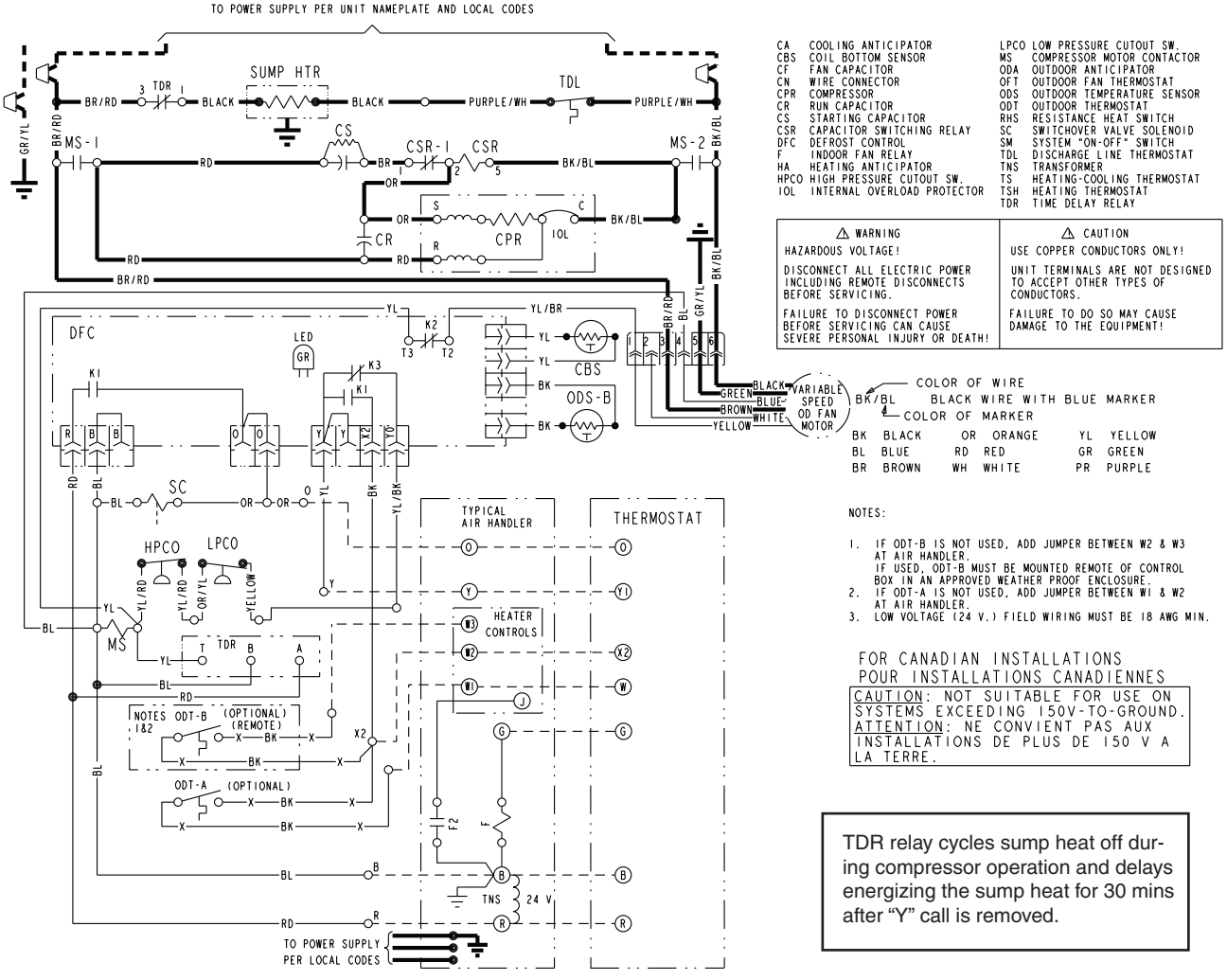
Printed from D156129P02 Rev 00

Electrical Data

Schematic Diagrams

(SEE LEGEND)

4TWB4061E



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CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
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⚠ WARNING	⚠ CAUTION
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BK/BL BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER

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FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

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ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

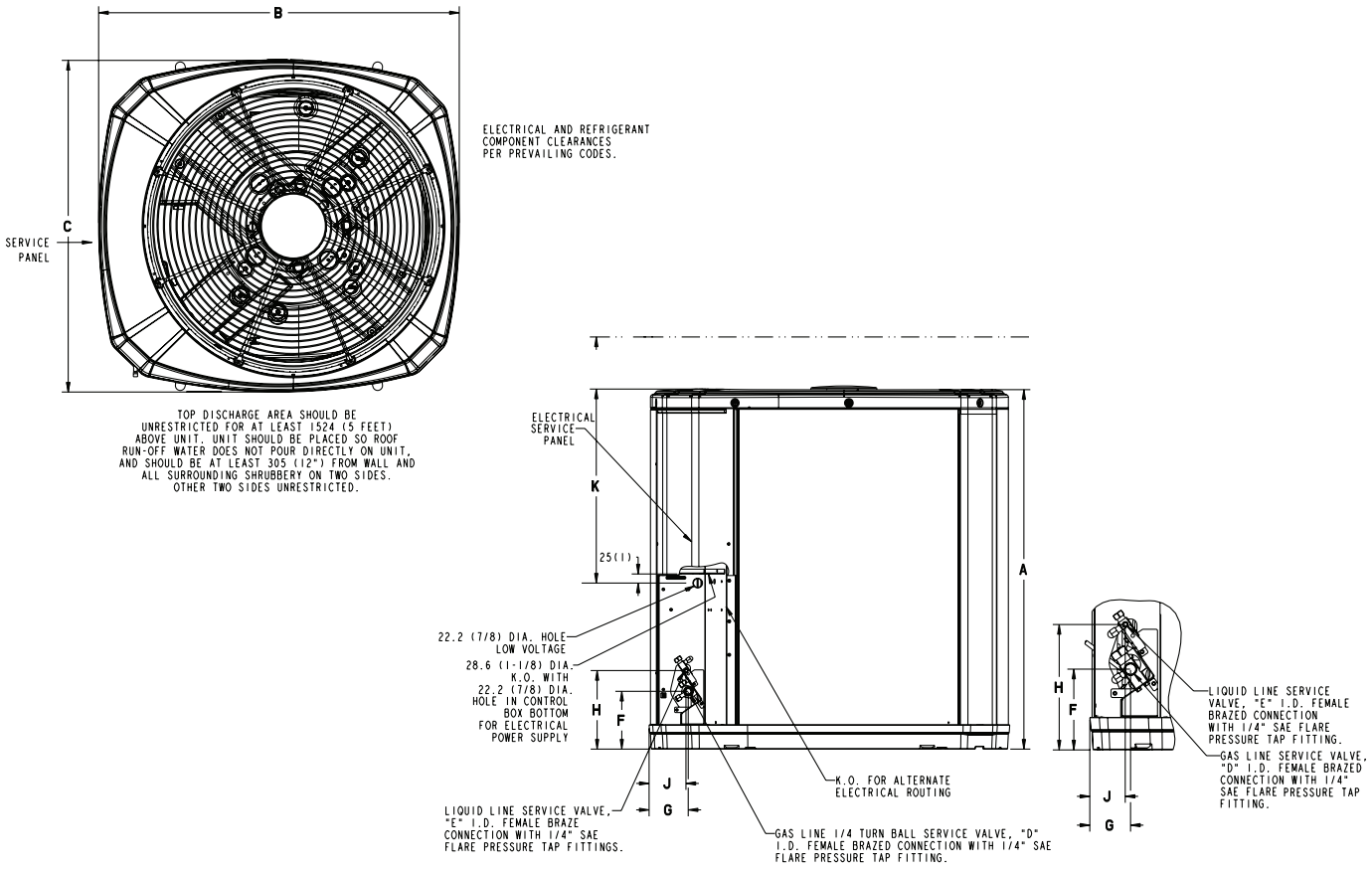
TDR relay cycles sump heat off during compressor operation and delays energizing the sump heat for 30 mins after "Y" call is removed.

PRINTED FROM D154974P02 REV. 00

Dimensions

4TWB4 Outline Drawing

Note: All dimensions are in MM (Inches).


B
C
SERVICE PANEL
ELECTRICAL AND REFRIGERANT COMPONENT CLEARANCES PER PREVAILING CODES.
TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT, AND SHOULD BE AT LEAST 305 (12") FROM WALL AND ALL SURROUNDING SHRUBBERY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.
ELECTRICAL SERVICE PANEL
K
25(1)
A
D
22.2 (7/8) DIA. HOLE LOW VOLTAGE
28.6 (1-1/8) DIA. K.O. WITH 22.2 (7/8) DIA. HOLE IN CONTROL BOX BOTTOM FOR ELECTRICAL POWER SUPPLY
H
F
J
G
LIQUID LINE SERVICE VALVE, "E" I.D. FEMALE BRAZE CONNECTION WITH 1/4" SAE FLARE PRESSURE TAP FITTINGS.
K.O. FOR ALTERNATE ELECTRICAL ROUTING
GAS LINE 1/4 TURN BALL SERVICE VALVE, "D" I.D. FEMALE BRAZED CONNECTION WITH 1/4" SAE FLARE PRESSURE TAP FITTING.
LIQUID LINE SERVICE VALVE, "E" I.D. FEMALE BRAZED CONNECTION WITH 1/4" SAE FLARE PRESSURE TAP FITTING.
GAS LINE SERVICE VALVE, "D" I.D. FEMALE BRAZED CONNECTION WITH 1/4" SAE FLARE PRESSURE TAP FITTING.

MODELS	BASE	A	B	C	D	E	F	G	H	J	K
4TWB4018G	4	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4TWB4024G	3	832 (32-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4TWB4030G	4	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWB4036G	4	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWB4042E	4	1045 (41 1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWB4048E	4	1147 (45 1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWB4049E	4	1147 (45 1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWB4060E	4	1147 (45 1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWB4061E	4	1147 (45 1/8)	946 (37-1/4)	870 (34-1/4)	1-1/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)

From Dwg. D156010

Mechanical Specification Options

General
The 4TWB4 is fully charged from the factory for up to 15 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are AHRI certified. The unit is certified to UL 1995. Exterior is designed for outdoor application.

Casing
Unit casing is constructed of heavy gauge, G90 galvanized steel and painted with a weather-resistant powder paint
on all louvers, panels, prepaint on all other panels. Corrosion and weather-proof CMBP-G30 DuraTuff™ base.

Refrigerant Controls
Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. A factory installed liquid line drier is standard.

Compressor
The Climatuff® compressor features internal over temperature and pressure protection and total dipped hermetic motor. Other features include: centrifugal oil pump and low vibration and noise.

Condenser Coil
The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Low Ambient Cooling
As manufactured, this unit has a cooling capability to 55°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 20° F.

Accessories
Thermostats — Cooling only and heat/cooling (manual and automatic changeover). Sub-base to match thermostat and locking thermostat cover.

AHRI CERTIFIED™
www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

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02/12

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